

Briefing sheet on Goliad, Rosita, and El Paso

6/7/12

Specifics on the Goliad and Rosita exemptions, the purpose of which is to allow uranium mining from aquifers by leaching.

- State permitted the Goliad site after a contentious 3 year process. Uranium Energy Corporation's (UEC) permit was approved by the TCEQ in December 2010. TCEQ submitted the subsequent exemption request on May 24, 2011.
- The Rosita exemption is an extension of an earlier Uranium Resources Inc. (URI) exemption. It faced no public opposition. Rosita is likely an EJ community.
- Technical concerns with Rosita are similar to that of Goliad. Domestic water source wells appear to be in proximity of the mining activity and thus possibly using the proposed exemption as a source of water (see attached Rosita Project map – Well Nos. R 86, 87, 88, 68). Natural GW flow is to the SSE. In addition, the map suggests human encroachment may have occurred in areas previously exempted (well no. RS 39). EPA is planning to conduct inspections on the area, confirming the facts of the application.
- On July 1 and August 8, 2011, R6 formally requested UEC and URI provide GW modeling as an option to show compliance with the primary exemption criterion that requires the portion of aquifer proposed for exemption does not currently serve as a source of drinking water (40 CFR 146.4 (a)).
- TCEQ responded negatively, asking EPA to continue processing both applications. Region 6 recently again requested modeling and TCEQ has again requested processing of the applications.
- Region 6 has met with representatives of UEC, URI and TCEQ separately on multiple occasions to explain in detail the modeling requested. Another meeting is scheduled in June to meet with TCEQ and UEC together.

Specifics on El Paso Exemption, the purpose of which is to allow the El Paso Water Utilities (EPWU) disposal of concentrate wastes from the Kay Bailey Hutchison desalination plant.

- On February 27, 2012 EPA received an application from TCEQ for exemption of a portion of the Fusselman, Montoya and El Paso aquifers in NE El Paso county. These are relatively deep aquifers (2222' – 2890') with high TDS content (8000 ppm+). No domestic water wells reach to those depths anywhere near the exemption.
- The portion of aquifers to be exempted covers a rectangular area of 115 square miles (19 x 6 miles), one half of which is on Fort Bliss. (see attached map)
- The geology is complex. The exemption zone consists of several grabens running north–south while generally dipping to the west bounded by significant faults created by the uplift of the Franklin Mts in the west and the Heuco Mts on the east.
- The receiving formations dip to the west with an average combined thickness of 2480'. Rapid GW flow is generally to the south. Few wells, all within the NE corner of the exemption actually penetrate the proposed exemption, reducing opportunity for direct measurement.
- The injection well field is with ¼ mile south of the border with New Mexico. TCEQ and the EPWU have approached the New Mexico Environment Department (NMED) directly throughout the process for acknowledgement. NMED has expressed no opposition to Region 6 but have stopped short of expressing a formal position.
- The criteria under which EPWU applies are 1) it does not currently serve as a USDW and 2) the aquifers contain between 3K and 10K TDS and are not reasonably expected to serve in the future as a USDW.
- The applicant used ModFlow to set exemption boundaries based on a 1000 fold attenuation of a desal waste contaminant plume migration created by injection of 3 MGD of wastes over 50 years. At those boundaries the concentration of injected wastes would not exceed background and should not raise risk to human health.
- TCEQ has conducted public participation. Notice was published in two local newspapers three times each. A public meeting was held in July 2011. The public raised no serious concerns.

URI, Inc.
Quarter Mile Area of Review
Rosita Project Water Wells 2009

Well ID	Well Type	Casing	Construction	Drill Type	Location	Approx. Depth	Completed	Plugged
RS-3	Livestock	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-4	Livestock	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-5	Livestock	Steel	Windmill	1978	Duval County	265	n/a	n/a
RS-6	Livestock	PVC	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-8	ABANDONED	n/a	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-10	ABANDONED	Steel	Handpump	n/a	Duval County	n/a	n/a	n/a
RS-11	Not Used	Steel	Handpump	n/a	Duval County	200	n/a	n/a
RS-12	Livestock/Domestic	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-13	ABANDONED	Steel	Submersible	n/a	Duval County	n/a	n/a	n/a
RS-14	Livestock	n/a	Not Used	n/a	Duval County	n/a	n/a	n/a
RS-16	ABANDONED	n/a	Not Used	n/a	Duval County	n/a	n/a	n/a
RS-18	Livestock	Steel	Submersible	1975	Duval County	180	n/a	n/a
RS-19	Livestock	Steel	Submersible	n/a	Duval County	n/a	n/a	n/a
RS-20	Livestock	Steel	Windmill	1977	Duval County	n/a	n/a	n/a
RS-21	Livestock	n/a	Not Used	n/a	Duval County	n/a	n/a	n/a
RS-24	ABANDONED	n/a	Not Used	n/a	Duval County	n/a	n/a	n/a
RS-25	Livestock	n/a	Submersible	n/a	Duval County	n/a	n/a	n/a
RS-32	Livestock	n/a	Submersible	n/a	Duval County	800	walled	n/a
RS-33	Livestock	n/a	Submersible	n/a	Duval County	n/a	n/a	n/a
RS-34	Domestic	n/a	Submersible	n/a	Duval County	n/a	n/a	n/a
RS-35	n/a	n/a	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-36	Livestock	n/a	Windmill	n/a	Duval County	320	n/a	n/a
RS-37	Domestic	PVC	n/a	4/07/2003	Duval County	300	4/07/2003 straight wall	n/a
RS-38	Domestic	PVC	n/a	4/06/2004	Duval County	420	4/08/2004 straight wall	n/a
RS-39	Domestic	PVC	n/a	4/18/2008	Duval County	200	4/28/2008 straight wall	n/a
RS-40	Domestic/P&A in Progress	PVC	Submersible	n/a	Duval County	n/a	n/a	n/a
RS-41	Domestic/P&A in Progress	Steel	Submersible	n/a	Duval County	200	n/a	n/a
RS-42	Livestock	n/a	Pump Jack	n/a	Duval County	280	n/a	n/a
RS-43	Livestock	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-44	ABANDONED	Steel	Pump Jack	n/a	Duval County	n/a	n/a	n/a
RS-45	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-46	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-47	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-48	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-49	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-50	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-51	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-52	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-53	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-54	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-55	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-56	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-57	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-58	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-59	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-60	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-61	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-62	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-63	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-64	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-65	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-66	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-67	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-68	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-69	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-70	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-71	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-72	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-73	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-74	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-75	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-76	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-77	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-78	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-79	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-80	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-81	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-82	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-83	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-84	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-85	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-86	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-87	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-88	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-89	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-90	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-91	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-92	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-93	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-94	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-95	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-96	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-97	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-98	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-99	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a
RS-100	ABANDONED	Steel	Windmill	n/a	Duval County	n/a	n/a	n/a

Screen 200-240
 Screen 640-760
 Screen 640-760

One body, PMS
 80-265' b2e



Explanation

- Class V Injection Wells
- Authorized Injection Wells
- Fort Bliss
- Proposed Exempt Area
- Concentrate Plume
- State Boundary
- One-Quarter Mile Buffer Zone

